

WESTERN HEMLOCK-WHITE FIR/DWARF OREGONGRAPE

Tsuga heterophylla-*Abies concolor*/*Berberis nervosa*

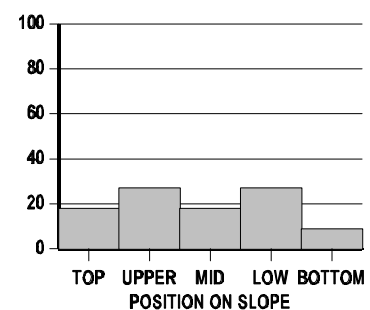
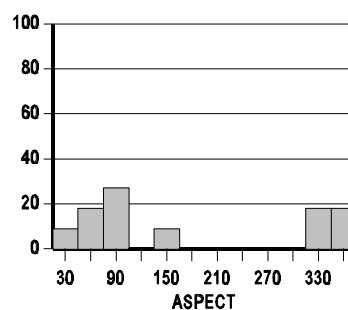
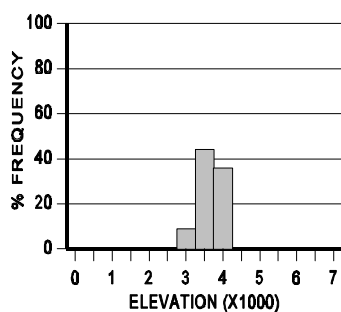
TSHE-ABCO/BENE2 (N=11; FS=11)



Distribution. This Association occurs on the North Umpqua and Diamond Lake Ranger Districts, Umpqua National Forest, and the Prospect and Butte Falls Ranger Districts, Rogue River National Forest.

Distinguishing Characteristics. This is a cool, dry, high elevation western hemlock association. The cool site indicators thin-leaved huckleberry and slender salal are common. This Association is often adjacent to the White Fir Series.

Soils. The predominant parent material is either basalt or andesite, while ash, pumice, breccia, sandstone, and tephra may be present occasionally. Based on nine plots sampled, soils are moderately deep and well drained. Surface and subsurface textures are loams, sandy loams, and silt loams with 20 to 70 percent rock fragments and 10 to 20 percent clay. The soil moisture regime may be udic or xeric and the soil moisture regime may be mesic or frigid. Soils classify into the



following subgroups: Typic Xerochrepts and Dystrochrepts, Typic Udorthents and Xerorthents.

Environment. This Association averages 3930 feet in elevation and is found predominantly on north and east aspects. Slope averages 30 percent and ranges from 3 to 50 percent. The Association occurs on all slope positions.

Vegetation Composition and Structure. This Association has very high total species richness for the Series, averaging 38. The overstory is dominated by Douglas-fir; western hemlock, white fir, and white pine are common. The understory is dominated by western hemlock, although Douglas-fir is also present. White fir and Pacific yew occur frequently. The most frequently encountered hardwood is golden chinquapin. Vine maple may have up to 30 percent cover. The shrub layer is dominated by dwarf Oregongrape, which may be dense. Slender salal, snow bramble, and creeping snowberry are common; and thin-leaved huckleberry, Pacific blackberry, Oregon boxwood, and baldhip rose are frequent. Western twinflower and common prince's-pine are present in the herb layer. Vanillaleaf and rattlesnake-plantain are frequent, and queen's cup, western starflower, white inside-out-flower, and round-leaved violet are common. Moss cover is low for the Series, averaging 6 percent.

Upper and mid-layer tree cover is relatively low for the Series, averaging 69 and 50 percent cover respectively. Lower layer tree cover is intermediate, averaging 44 percent. High shrub cover is low, averaging only 3 percent while low shrubs are more abundant with 37 percent cover. Total herb cover is intermediate for the Series, averaging 31 percent.

Common name	Code	Constancy	Cover	Avg. Richness
<u>Overstory trees</u>				4
Douglas-fir	PSME	100	27	
Western hemlock	TSHE	73	28	
White fir	ABCO	64	20	
Western white pine	PIMO3	64	10	
<u>Understory trees</u>				6
Western hemlock	TSHE	100	28	
Douglas-fir	PSME	100	5	
White fir	ABCO	91	9	
Pacific yew	TABR2	91	5	
Golden chinquapin	CACH6	82	6	
Western white pine	PIMO3	64	2	
<u>Shrubs</u>				12
Dwarf Oregongrape	BENE2	100	19	
Thin-leaved huckleberry	VAME	100	2	
Baldhip rose	ROGY	91	2	
Pacific blackberry	RUUR	91	2	
Oregon boxwood	PAMY	82	2	
<u>Herbs</u>				19
Western twinflower	LIBOL	100	8	
Common prince's-pine	CHUM	100	5	
Vanillaleaf	ACTR	82	8	